

DOCUMENT RESUME

ED 459 235

UD 034 487

TITLE State Summary of Indiana. Ed Watch Online.
INSTITUTION Education Trust, Washington, DC.
SPONS AGENCY Carnegie Corp. of New York, NY.
PUB DATE 2001-00-00
NOTE 27p.; Also supported by the Washington Mutual Foundation.
For the other State Summaries, see UD 034 473-523. For the
Summary of the Nation, see UD 034 472.
AVAILABLE FROM The Education Trust, 1725 K Street, NW, Suite 200,
Washington, DC 20006. Tel: 202-293-1217; Fax: 202-293-2605.
For full text: <http://204.176.179.36/dc/edtrust/edstart.cfm>.
PUB TYPE Numerical/Quantitative Data (110)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Achievement; *Black Students; Curriculum;
Educational Attainment; Educational Finance; Elementary
Secondary Education; Equal Education; *Hispanic American
Students; Mathematics Achievement; Minority Group Children;
*Poverty; *Racial Differences; Reading Achievement; Science
Achievement; Special Needs Students; Tables (Data); Teacher
Effectiveness; Teaching Skills; White Students
IDENTIFIERS African Americans; Indiana; Latinos; National Assessment of
Educational Progress

ABSTRACT

This report provides data on the academic achievement gap that separates low-income and minority students from other students, examining how well different groups of students perform in Indiana and noting inequities in teacher quality, course offerings, and funding. Included are tables and data that provide: a frontier gap analysis (a comparison Indiana to the leaders in achievement and gap closing); student profile (the demographic distribution of youth in Indiana); state performance (academic achievement and educational attainment); opportunity (well prepared teachers, challenging curricula, special student placements, effective instruction, and annual per pupil investments); minority achievement gains, state by state; and analysis of minority-white achievement gaps by subject area and grade level. Indiana did not participate in the National Assessment of Educational Progress (NAEP) tests in 1998; achievement profiles are based on 1996 results. African American 8th graders in Indiana score more than 3 years behind white 8th graders in the state in math and science, while Hispanic 8th graders score about 2 years behind. Low-income 8th graders score more than 2 years behind non-poor 8th graders in the state in math and science. African American 4th graders in Indiana, however, did make more progress in math from 1992 to 1996 in Indiana than African American 4th graders in almost every other state. (Contains 24 references.) (SM)

State Summary of Indiana



To eliminate the achievement gap that separates low-income and minority students from other students, we must understand what that gap looks like and where it originates. How well are different groups of students in your state performing? Could inequities in course selection or teacher quality be contributing to the gap? This State Summary Report provides at least some of the answers.

INDIANA HIGHLIGHTS

- Student achievement data are based on NAEP. Indiana did not participate in any of the NAEP tests in 1998, therefore it is impossible to provide a full public picture of achievement in Indiana.
- We do know that African American 4th graders in Indiana made more progress in math from 1992 to 1996 than African American 4th graders in almost every other state.
- However, African American 8th graders in Indiana score more than three years behind White 8th graders in the state in math and science.
- Latino 8th graders in Indiana score about two years behind White 8th graders in the state in math and science.
- Low-income 8th graders in Indiana score more than two years behind non-poor 8th graders in the state in math and science.

(The description above is meant to provide a general overview of the state's gaps and progress in student achievement. Readers who wish to compare states on these measures should consult the precise figures reported on the "Frontier Gap Analysis" page inside.)

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

P. Barth
The Education Trust

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.



The
Education
Trust

www.edtrust.org

BEST COPY AVAILABLE

Table of Contents

| | |
|---|----|
| Frontier Gap Analysis | 1 |
| <i>a comparison of your state to the leaders in achievement and gap closing</i> | |
| Student Profile | 2 |
| <i>the demographic distribution of youth in your state</i> | |
| State Performance | 3 |
| Academic achievement | 3 |
| <i>NAEP, ACT/SAT scores by group</i> | |
| Attainment | 7 |
| <i>high school & college by group</i> | |
| Opportunity | 8 |
| Well-prepared teachers | 8 |
| Challenging curricula | 8 |
| Special student placements | 9 |
| Effective instruction | 9 |
| Investments | 10 |
| Biggest Gainer | 12 |
| How big is the achievement gap in your state? | 15 |
| <i>analysis of minority-White gaps by subject area and grade level</i> | |
| References | 23 |

PLEASE NOTE that the State Summary Reports are merely a selection of the data from the Education Watch Interactive Data site. For more complete data, and for more cross-state comparisons, please visit the site at www.edtrust.org. Do remember, however, that you may have fuller, richer or more current data sets in your state for some of the indicators we report, because we only use data that can be compared across states. We therefore encourage you to gather and examine a wide range of data from your own state and local districts. In this way, communities will come to see a full picture of how their students are faring and what can be done to improve results.

INDIANA

Frontier Gap Analysis

Education Watch Online introduces a new way to look at achievement gaps in each state: by comparing them with the "frontier" state for a particular group of students, that is, the state with the highest average score for that group. The comparison shows that, in most cases, achievement gaps would shrink dramatically if a state's poor or minority students performed as well as the same group of students in the frontier state. But that's only part of a longer journey; visit the Education Watch Online interactive Web site to see how far your state has to go before all groups of students perform at the "proficient" level on the National Assessment of Educational Progress (NAEP).

How to read the table:

Within-State Achievement Gap: For African American and Latino students, this is the difference between that group's average score and the average score of white students on a particular test. For low-income students, this is the difference between their average score and the average score of non-poor students on the test.

Example: "On Average, Indiana's African American students scored 27 points lower than the state's White students on NAEP's 1996 4th Grade Math Assessment."

Frontier State for Group: This is the state where a particular group of students - African American, Latino, or low-income - scores the highest on the test. But, because such students can achieve much higher than they do even in the frontier state, the current frontier should be viewed as a short-term target rather than a long-term goal.

Example: "African American students in Texas out-perform African American students in all other states on NAEP's 1996 4th Grade Math Assessment."

Group's Distance to Frontier State: For African American, Latino, and low-income students, this is the difference between their average score and the average score for the same group of students in the frontier state.

Example: "African American students in Indiana scored 6 points behind African American students in Texas, the frontier state for African American students on that test."

Amount State's Achievement Gap Would Shrink: This is approximately how much the state's achievement gap would shrink if its African American, Latino, and low-income students scored as well as the same group of students in the frontier state.

Example: "If Indiana's African American 4th graders scored as well as those in Texas, the state's math achievement gap between African American and White 4th Graders would shrink by 22%."

NOTE: A difference of 10 points is roughly equivalent to one year's worth of learning.

| NAEP Assessment | Group | Within-State Achievement Gap | Frontier State for Group | Group's Distance to Frontier | Amount State's Achievement Gap Would Shrink * |
|--------------------------|------------------|-----------------------------------|--------------------------|------------------------------|---|
| 4th Grade Math (1996) | African American | 27 | TX | 6 | 22% |
| | Latino | 18 | ND | 7 | 39% |
| | Low-Income | 23 | ND | 10 | 43% |
| 8th Grade Math (1996) | African American | 33 | NE | 9 | 27% |
| | Latino | 26 | IA | 13 | 50% |
| | Low-Income | 26 | ND | 18 | 69% |
| 8th Grade Science (1996) | African American | 33 | CO | 17 | 51% |
| | Latino | 19 | MT | 8 | 43% |
| | Low-Income | 22 | ND | 21 | 95% |
| 4th Grade Reading (1998) | African American | STATE DID NOT PARTICIPATE IN TEST | | | |
| | Latino | | | | |
| | Low-Income | | | | |
| 8th Grade Reading (1998) | African American | STATE DID NOT PARTICIPATE IN TEST | | | |
| | Latino | | | | |
| | Low-Income | | | | |
| 8th Grade Writing (1998) | African American | STATE DID NOT PARTICIPATE IN TEST | | | |
| | Latino | | | | |
| | Low-Income | | | | |

* Calculations take into account decimals. For clarity of presentation, data are displayed as whole numbers. Therefore, some figures may differ slightly from hand calculations.

Note: Low-Income refers to students eligible for free or reduced price lunch.

SOURCE: Education Trust calculations based on average scaled scores on the National Assessment of Educational Progress as reported by the National Center for Education Statistics.

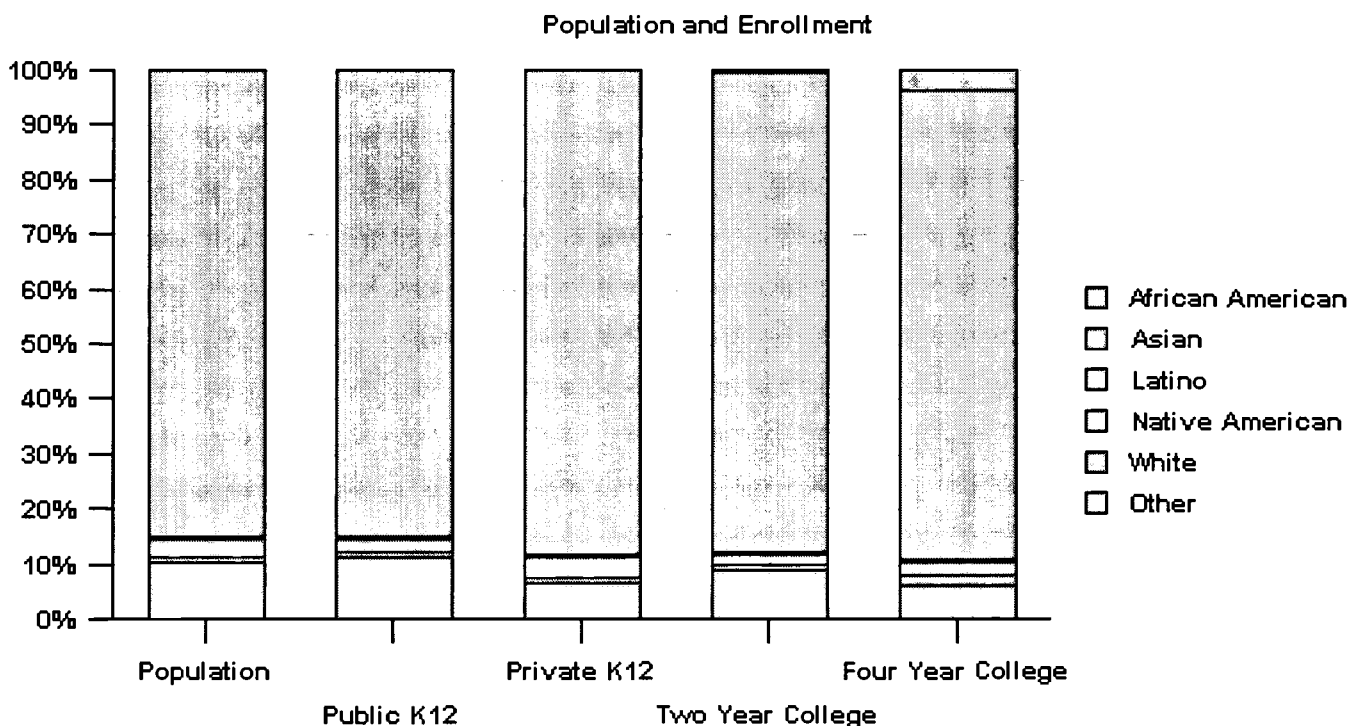
INDIANA

Student Profile

STUDENT PROFILE

Population and enrollments: These data will offer a picture of the student population in your state. Comparing the demographic distribution of students across each educational level will show what happens to children as they journey through the education system. Significant differences should raise questions about equity.

| | Population Ages 5-24 | Public K-12 | Private K-12 | Two Year Colleges | Four Year Colleges |
|------------------|-------------------------|-------------|--------------|----------------------|-----------------------|
| African American | 10.1% | 11.3% | 6.5% | 8.8% | 6.1% |
| Asian | 1.1% | 0.8% | 1.2% | 0.8% | 2.0% |
| Latino | 3.4% | 2.6% | 3.6% | 2.1% | 2.4% |
| Native American | 0.2% | 0.2% | 0.3% | 0.6% | 0.4% |
| White | 85.2% | 85.1% | 88.4% | 87.3% | 85.3% |
| Other | | | | 0.5% | 3.9% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Number | 1,691,626 | 987,483 | 105,205 | 44,017 | 247,726 |



State Performance

ACADEMIC ACHIEVEMENT

NAEP achievement levels: The National Assessment of Educational Progress (NAEP) is administered to representative samples of students nationally and in participating states. NAEP achievement is reported by percents in four categories: Advanced, Proficient, Basic and Below Basic. "Proficient" indicates the desired level of competency for students at a particular grade in a particular subject. In this indicator, closing the achievement gap between groups is critical, but it is not enough. Schools have a long way to go to move all American young people to proficiency.

1998 NAEP 8th grade reading

| | Adv. | Prof. | Basic | < Basic |
|------------------|------|-------|-------|---------|
| African American | | | | |
| Asian | | | | |
| Latino | | | | |
| Native American | | | | |
| White | | | | |
| All | | | | |
| Non-Poor | | | | |
| Poor | | | | |

*Note: all proficiency level data in percents.

1998 NAEP 8th grade writing

| | Adv. | Prof. | Basic | < Basic |
|------------------|------|-------|-------|---------|
| African American | | | | |
| Asian | | | | |
| Latino | | | | |
| Native American | | | | |
| White | | | | |
| All | | | | |
| Non-Poor | | | | |
| Poor | | | | |

*Note: all proficiency level data in percents.

1998 NAEP 4th grade reading

| | Adv. | Prof. | Basic | < Basic |
|------------------|------|-------|-------|---------|
| African American | | | | |
| Asian | | | | |
| Latino | | | | |
| Native American | | | | |
| White | | | | |
| All | | | | |
| Non-Poor | | | | |
| Poor | | | | |

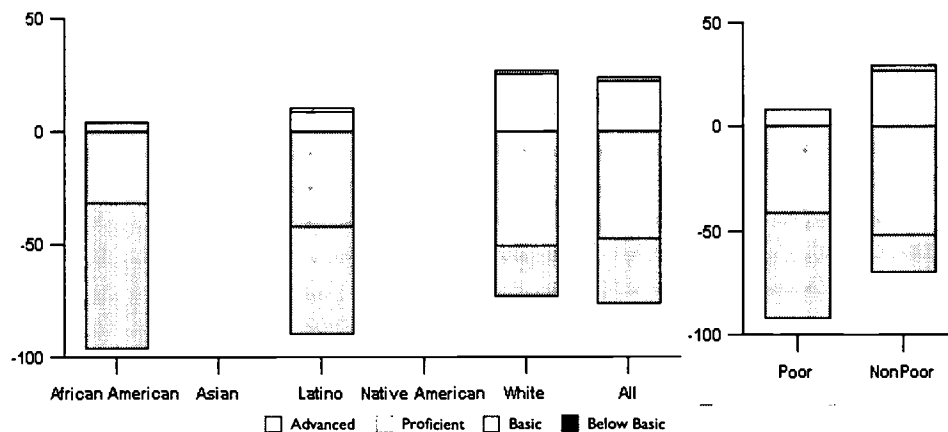
*Note: all proficiency level data in percents.

INDIANA

State Performance

1996 NAEP 4th grade math

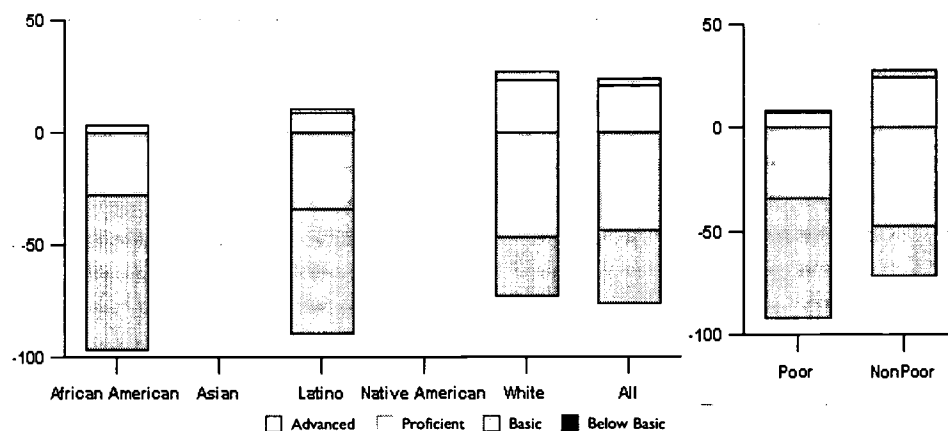
| | Adv. | Prof. | Basic | < Basic |
|------------------|------|-------|-------|---------|
| African American | 0 | 4 | 32 | 64 |
| Asian | | | | |
| Latino | 1 | 9 | 42 | 48 |
| Native American | | | | |
| White | 2 | 25 | 51 | 22 |
| All | 2 | 22 | 48 | 28 |
| Non-Poor | 3 | 27 | 52 | 18 |
| Poor | 0 | 8 | 41 | 51 |



*Note: all proficiency level data in percents.

1996 NAEP 8th grade math

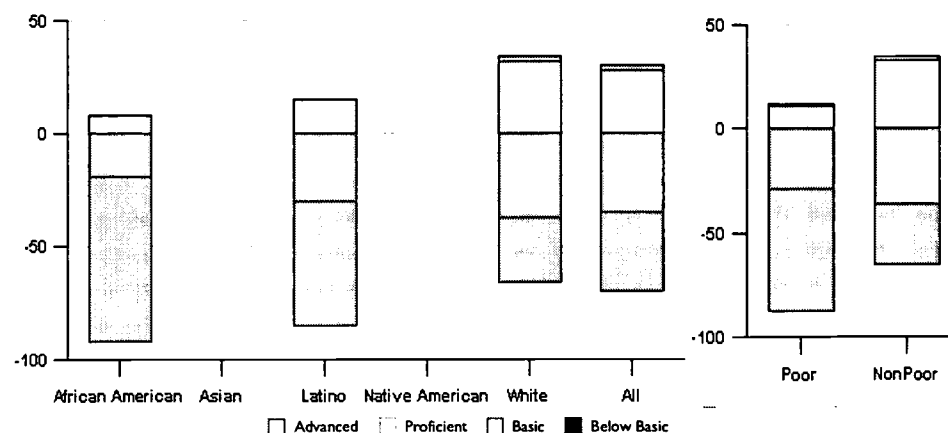
| | Adv. | Prof. | Basic | < Basic |
|------------------|------|-------|-------|---------|
| African American | 0 | 3 | 28 | 69 |
| Asian | | | | |
| Latino | 1 | 9 | 34 | 56 |
| Native American | | | | |
| White | 4 | 23 | 47 | 26 |
| All | 3 | 21 | 44 | 32 |
| Non-Poor | 4 | 24 | 48 | 24 |
| Poor | 1 | 7 | 34 | 58 |



*Note: all proficiency level data in percents.

1996 NAEP 8th grade science

| | Adv. | Prof. | Basic | < Basic |
|------------------|------|-------|-------|---------|
| African American | 0 | 8 | 19 | 73 |
| Asian | | | | |
| Latino | 0 | 15 | 30 | 55 |
| Native American | | | | |
| White | 2 | 32 | 37 | 29 |
| All | 2 | 28 | 35 | 35 |
| Non-Poor | 2 | 33 | 36 | 29 |
| Poor | 1 | 11 | 29 | 59 |



*Note: all proficiency level data in percents.

INDIANA

State Performance

ACADEMIC ACHIEVEMENT

NAEP multiyear trends: Looking at change over time both in absolute student performance and in achievement gaps can show whether a state is making progress, holding static, or even backsliding. This can help states focus actions needed for improvement, and measure whether existing initiatives are effectively meeting their goals in achievement and equity.

1992-98 4th grade reading

No Trend Data

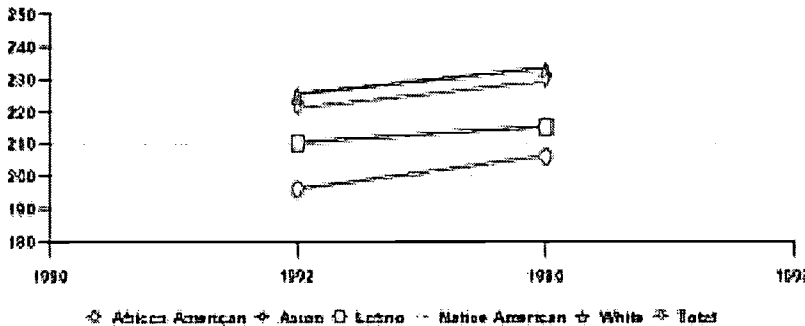
Gap Changes Over Time

| Year | African American- White Gap | Latino- White Gap |
|------------------|--------------------------------|----------------------|
| 1992 | | |
| 1994 | | |
| 1998 | | |
| Change* 92-98 | | |

Note: Change based on absolute difference in average group scale score—interpret with caution (not necessarily statistically significant)
*positive change=gap widened; negative change=gap narrowed

1992-96 4th grade math

Indiana Grade 4 Math Scale Scores



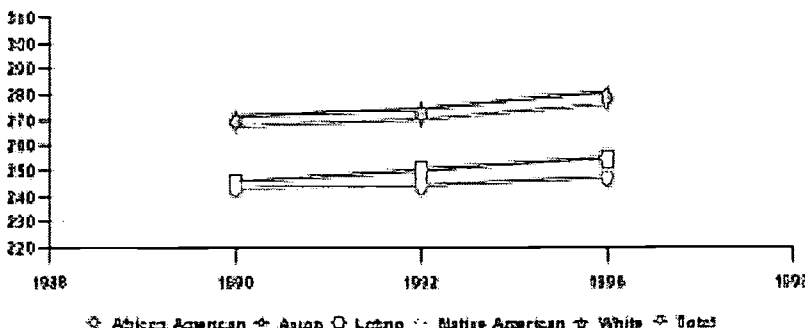
Gap Changes Over Time

| Year | African American- White Gap | Latino- White Gap |
|------------------|--------------------------------|----------------------|
| 1992 | 29 | 15 |
| 1996 | 27 | 18 |
| Change* 92-96 | -2 | 3 |

Note: Change based on absolute difference in average group scale score—interpret with caution (not necessarily statistically significant)
*positive change=gap widened; negative change=gap narrowed

1990-96 8th grade math

Indiana Grade 8 Math Scale Scores



Gap Changes Over Time

| Year | African American- White Gap | Latino- White Gap |
|------------------|--------------------------------|----------------------|
| 1990 | 28 | 26 |
| 1992 | 30 | 24 |
| 1996 | 33 | 26 |
| Change* 90-96 | 5 | 0 |

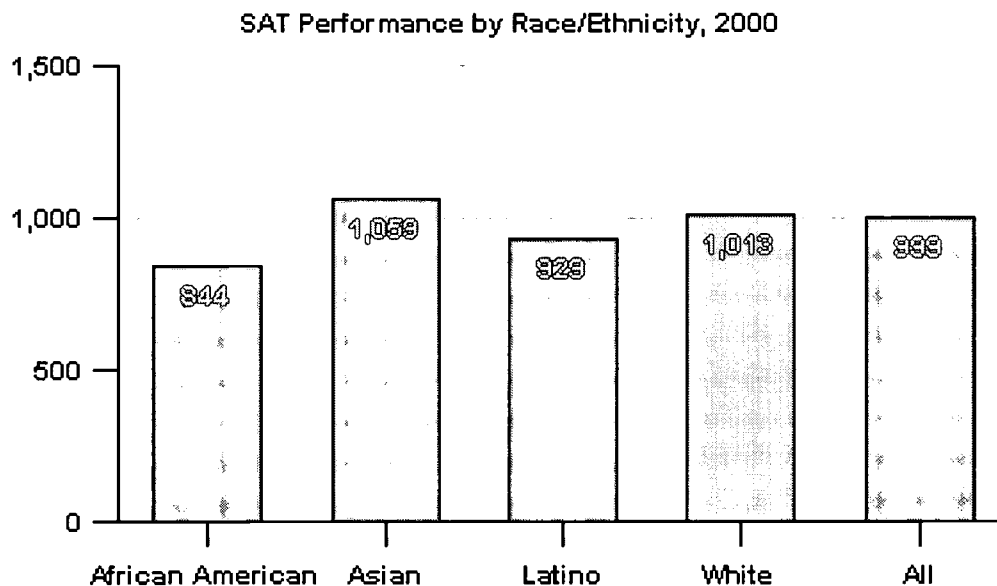
Note: Change based on absolute difference in average group scale score—interpret with caution (not necessarily statistically significant)
*positive change=gap widened; negative change=gap narrowed

INDIANA

State Performance

Average scores on college admissions tests: While increasing numbers of minorities are taking college admissions tests, in virtually every state, African American, Latino and Native American students still score well below other students. To close this gap, states should ensure that all students complete a rigorous college preparatory sequence, and that all students are held to the same expectations of postsecondary attainment. The SAT and ACT are the major nationally used college admissions tests. Below we report the scores for the predominant test used by your state's colleges and universities.

SAT Performance



Note: A perfect score for the SAT is 1600. A perfect score for the ACT is 36.

Distribution of SAT Test Takers, 2000

Test Takers

| | |
|------------------|--------|
| African American | 6.0% |
| Asian | 1.7% |
| Latino | 2.4% |
| Native American | I.r. |
| White | 89.8% |
| Total | 100.0% |
| Number | 35,187 |

I.r. low reliability

INDIANA

State Performance

ATTAINMENT

In order to determine equity in attainment rates, we compare regular diploma recipients with the number of 8th graders four years earlier, and report freshmen enrollments compared to bachelor's degrees four years later. Taken together, these show the flow of groups of students from middle school to high school graduation and through postsecondary education. Although these data do not track individual students from year to year, they should paint a fairly representative picture of who makes it through high school and college.

8th Graders vs. Diplomas

| | 8th Graders 1993-94 | Diplomas 1998 |
|------------------|------------------------|------------------|
| African American | 11.1% | 8.4% |
| Asian | 0.6% | 1.0% |
| Latino | 2.2% | 2.0% |
| Native American | 0.2% | 0.2% |
| White | 86.0% | 88.4% |
| Total | 100.0% | 100.0% |
| Number | 78,125 | 58,899 |

Chances For College, 1998

In the fall of 1998, the percentage of 19 year-olds in Indiana who were enrolled in college was (includes part-time and full-time students): 42.9%

Freshmen vs. Degrees Awarded

| | Freshmen* 1993-94 | Bachelor's Degrees 1997 |
|------------------|----------------------|----------------------------|
| African American | 6.0% | 3.9% |
| Asian | 1.5% | 2.2% |
| Latino | 2.3% | 2.0% |
| Native American | I.r. | I.r. |
| White | 88.7% | 88.1% |
| Other | 1.4% | 3.8% |
| Total | 100.0% | 100.0% |
| Number | 49,111 | 30,477 |

*Note: Includes first-time full time and part time freshmen at 2-year and 4-year institutions.

I.r. low reliability

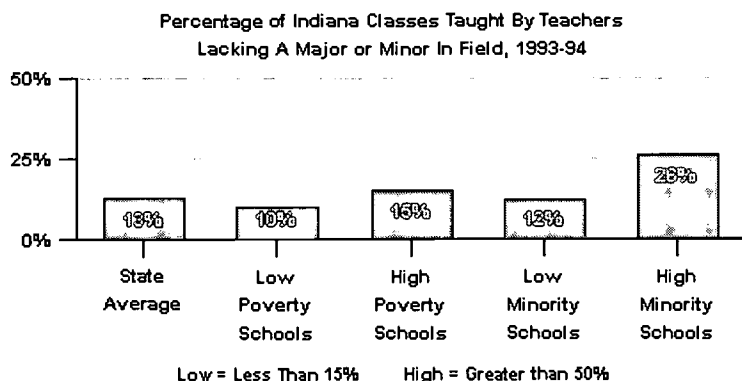
INDIANA

Opportunity

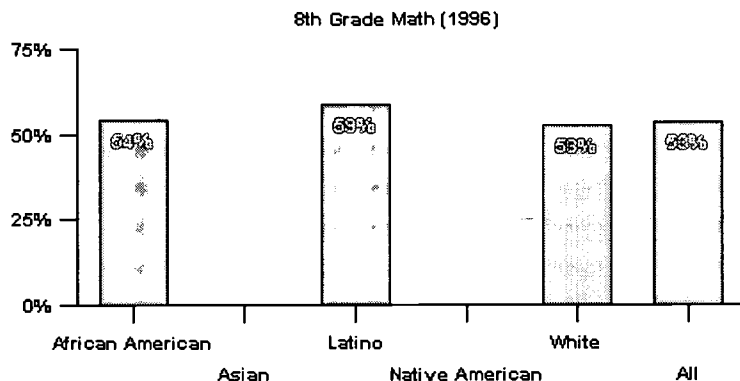
WELL-PREPARED TEACHERS

The best educational investment a state can make is to give each student a knowledgeable teacher. One key measure of teachers' qualifications is whether they have a major in their particular field. The distribution of well-prepared teachers is an important indicator of equal educational opportunity for different groups of students.

Teachers Without Degree in Field (Secondary)



Math Students With Math-Major Teachers



CHALLENGING CURRICULA

Industry has joined colleges in the demand for individuals with high-level knowledge and skills. This means that all students need a rigorous curriculum in order to be prepared for success, whether they choose college or work. Yet too few students have the opportunity to gain these skills through rigorous math and science courses.

Percentage of students who take high-level courses: Course-taking disaggregated by race and ethnicity is an indicator of the amount of access students have to challenging subject matter and the essential skills it develops for life after high school.

Example for reading this chart: Of all African American 8th graders, this percentage took Algebra I.

| Subject | African American | Asian | Latino | Native American | White | All |
|--------------------------|------------------|-------|--------|-----------------|-------|-----|
| 8th Grade Algebra | 12% | | 14% | | 23% | 21% |
| Algebra II by Graduation | | | | | | 61% |
| Chemistry by Graduation | | | | | | 58% |

Composition of AP test takers: Students take Advanced Placement (AP) exams after completing year-long AP courses, typically among the highest level offered in high schools. In a system where all students have equal access to these opportunities, the percentage of test-takers by race and ethnicity would be proportional to their representation in public K-12 enrollment.

Example: Of all AP test-takers, this percentage were African Americans

AP Test Takers, 2000

| | Public K-12 | English/Composition | Calculus AB | Biology |
|------------------|-------------|---------------------|-------------|---------|
| African American | 11.3% | 5.1% | 2.2% | 3.4% |
| Asian | 0.8% | 3.4% | 4.7% | 6.7% |
| Latino | 2.6% | 2.5% | 1.8% | 1.7% |
| Native American | 0.2% | I.r. | I.r. | I.r. |
| White | 85.1% | 89.0% | 91.3% | 88.1% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% |
| Number | 987,483 | 3,274 | 3,452 | 1,544 |

I.r. low reliability

INDIANA

Opportunity

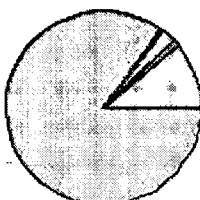
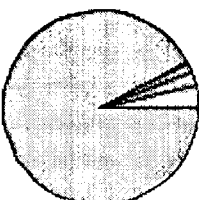
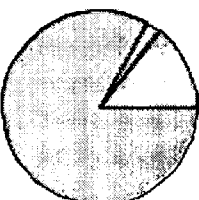
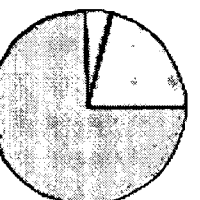
SPECIAL STUDENT PLACEMENTS

The school programs listed below vary a great deal in their level of curriculum, expectations, and instruction. Poor and minority students should not face disproportionate placement in programs with lower academic expectations. If there is equity in placements, the number of Latino students, for example, placed in gifted and talented programs and in special education should be proportional to Latinos enrolled in K-12. Although suspensions are not precisely an academic program, we include data about them because too often they represent a placement out of the system altogether.

Student Placement, 1998

| | Public K-12 | Gifted and Talented | Special Education | Suspensions |
|------------------|-------------|---------------------|-------------------|-------------|
| African American | 11.3% | 3.93% | 14.28% | 20.99% |
| Asian | 0.8% | 2.04% | 0.22% | 0.28% |
| Latino | 2.6% | 1.72% | 2.26% | 4.12% |
| Native American | 0.2% | 0.13% | 0.18% | 0.12% |
| White | 85.1% | 92.18% | 83.06% | 74.49% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% |
| Number | 987,483 | 59,405 | 85,376 | 83,072 |

☐ African American
☐ Asian
☐ Latino
☐ Native American
☐ White

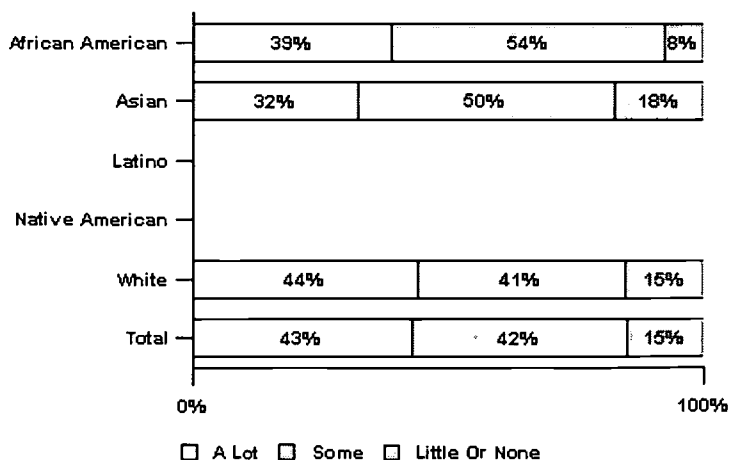





EFFECTIVE INSTRUCTION

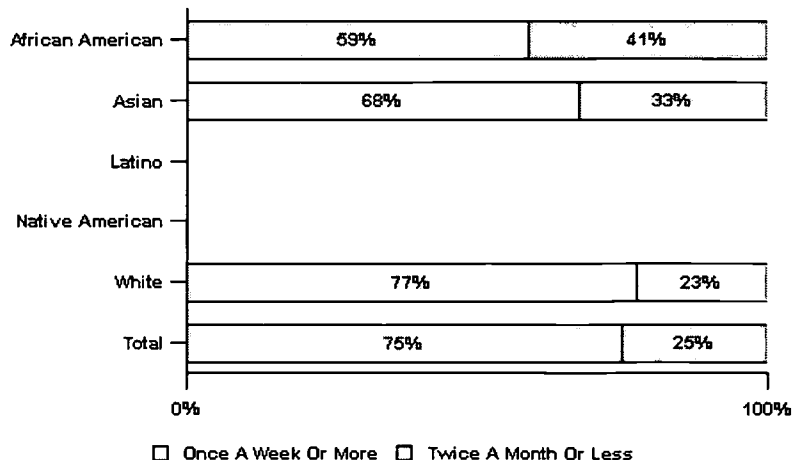
Students can do no better than the assignments and instruction they are given. Research shows that students whose teachers emphasize mathematical problem solving and hands-on science activities score significantly higher on NAEP. How often students experience these practices is another indicator of educational opportunity.

Math and Science Practice (8th Grade) 1996

Emphasis on Solving Complex Math Problems



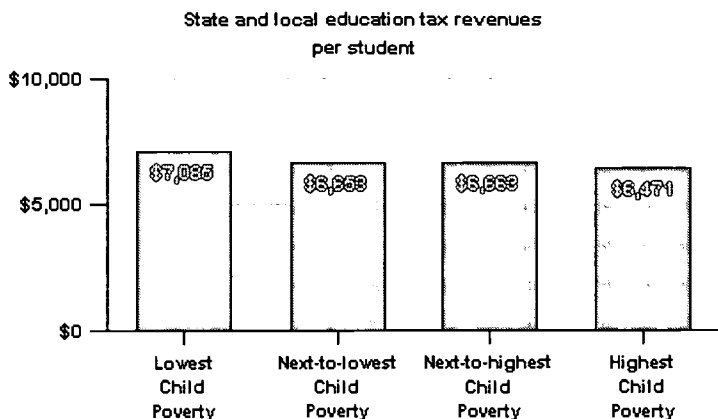
Frequency of Hands on Science



INVESTMENTS

State and local education dollars by district poverty and minority enrollment, 1996-97: A growing body of research shows that additional dollars spent on the right things can substantially raise the achievement of poor and minority students. But despite decades of school finance litigation in many states, students in districts with the greatest challenges by and large still receive the fewest resources.

Education Dollars by District Poverty



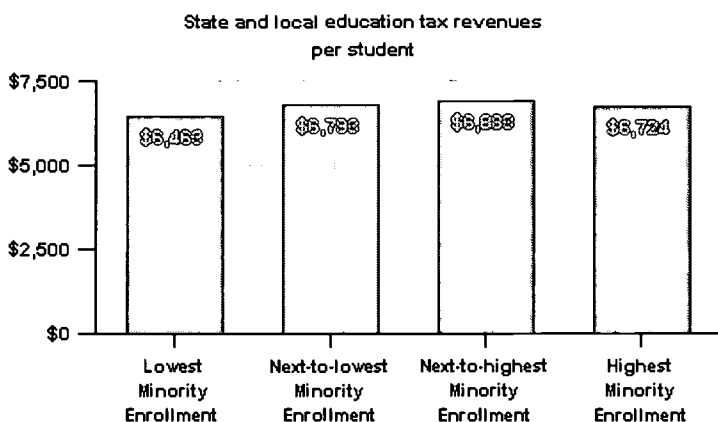
NOTE: Dollars are adjusted for student needs and regional cost differences. Districts are divided into quarters by child poverty.

Analysis

Research suggests that investing more funds in education services for disadvantaged students can help close the achievement gap.

In Indiana, districts with the highest child poverty rates have \$614 fewer state and local dollars to spend per student compared with the lowest-poverty districts. That translates into a total \$15,350 for a typical classroom of 25 students.

Education Dollars by District Minority Enrollment



NOTE: Dollars are adjusted for student needs and regional cost differences. Districts are divided into quarters by enrollment.

Analysis

Research suggests that investing more funds in education services for disadvantaged students can help close the achievement gap.

In Indiana, districts with the highest minority enrollments have \$261 fewer state and local dollars to spend per student compared with the lowest-minority districts. That translates into a total \$6,525 for a typical classroom of 25 students.

INDIANA

Opportunity

Per Pupil Investment, 1999-2000: To facilitate comparison across states, data are adjusted to reflect the higher cost of educating students who live in places where educational supplies and sources tend to be more expensive, such as large cities. These numbers will therefore differ from unadjusted Per Pupil Expenditure figures. Even cost adjusted dollars per students vary a great deal from state to state, from a low in Utah of \$4,280, to a high of \$9,057 in West Virginia.

The State average per pupil investment was. **\$7,540.00**

Effort, 1997-98: By surfacing the level of a state's commitment, this calculation of "effort" allows comparisons between wealthy and less affluent states that may not be apparent when examining per pupil spending alone. For example, a state with low wealth may rank low on per pupil spending, but an examination of "Effort" shows that a high percentage of its wealth is devoted to education. The state in this example would rank favorably against a wealthier state that commits a smaller percentage of its resources to education, even though the latter state's actual "per pupil" dollars may be larger. Among the 50 states this ranges from a low of \$27.07 in Delaware, to a high of \$52.77 in Vermont.

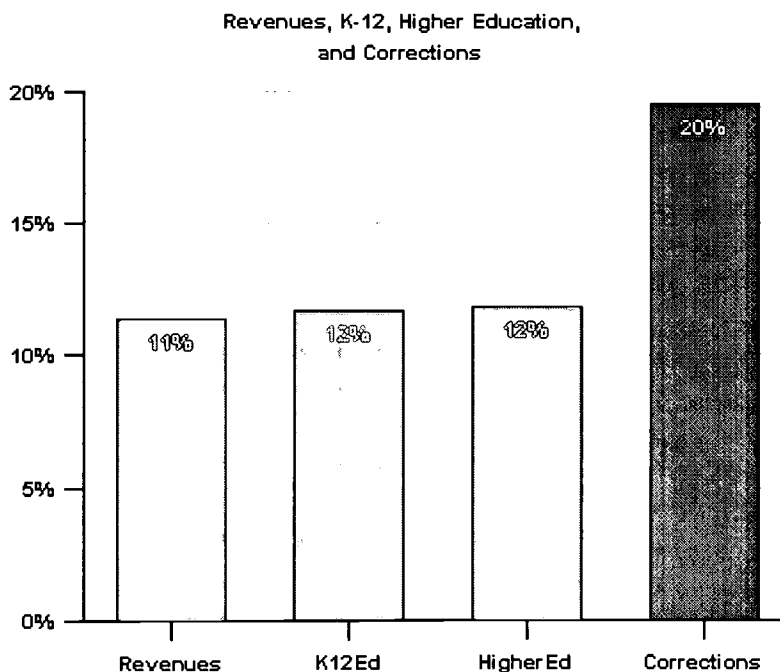
For every \$1,000 in annual personal income, the combined state and local investment in K-12 education was. **\$43.66**

College vs. Prison, 1998

Compares the annual cost of maintaining an individual in prison to the price of tuition, room and board at the state's leading public university.

| Institution | Annual College Cost | Annual Prison Cost |
|------------------------------------|---------------------|--------------------|
| University of Indiana, Bloomington | \$9,249.50 | \$17,067.40 |

Change in state investments, 1997-99: By comparing trends in total state spending and on elementary/secondary education, higher education and corrections over a two-year period, we can gauge the priority a state gives to investing in education.



Minority Achievement Gains, State by State

4th Grade Math Scale Scores, 1992-96

Where are minority students making the largest gains?

The following tables show how many points African American and Latino students gained or lost on the National Assessment of Educational Progress (NAEP). The tables only include those states that participated in both years and had enough members of each student group in the testing sample.

African American

| State | 1992 | 1996 | Change |
|----------------------|------------|------------|-----------|
| Massachusetts | 194 | 208 | +14 |
| Michigan | 186 | 199 | +13 |
| Texas | 199 | 212 | +13 |
| Iowa | 194 | 205 | +11 |
| North Carolina | 194 | 205 | +11 |
| Connecticut | 195 | 206 | +11 |
| Indiana | 196 | 206 | +10 |
| Louisiana | 187 | 196 | +9 |
| NATION | 192 | 200 | +8 |
| Nebraska | 191 | 198 | +7 |
| Mississippi | 190 | 197 | +7 |
| Virginia | 198 | 204 | +6 |
| Tennessee | 193 | 198 | +5 |
| Alabama | 189 | 194 | +5 |
| Missouri | 196 | 201 | +5 |
| New Jersey | 199 | 204 | +5 |
| Wisconsin | 196 | 201 | +5 |
| Pennsylvania | 194 | 199 | +5 |
| Florida | 191 | 195 | +4 |
| Arkansas | 189 | 193 | +4 |
| Maryland | 195 | 199 | +4 |
| New York | 200 | 204 | +4 |
| California | 184 | 188 | +4 |
| Georgia | 197 | 201 | +4 |
| Hawaii | 200 | 204 | +4 |
| South Carolina | 195 | 199 | +4 |
| Rhode Island | 191 | 194 | +3 |
| Kentucky | 201 | 204 | +3 |
| New Mexico | 203 | 205 | +2 |
| West Virginia | 204 | 205 | +1 |
| Arizona | 199 | 200 | +1 |
| Minnesota | 194 | 193 | -1 |
| Delaware | 198 | 195 | -3 |
| Colorado | 200 | 196 | -4 |
| District Of Columbia | 190 | 184 | -6 |

Latino

| State | 1992 | 1996 | Change |
|----------------------|------------|------------|-----------|
| Tennessee | 193 | 209 | +16 |
| Minnesota | 208 | 219 | +11 |
| Rhode Island | 190 | 201 | +11 |
| Mississippi | 186 | 196 | +10 |
| Arkansas | 195 | 203 | +8 |
| Texas | 209 | 216 | +7 |
| North Dakota | 215 | 222 | +7 |
| Missouri | 208 | 214 | +6 |
| West Virginia | 204 | 210 | +6 |
| North Carolina | 200 | 206 | +6 |
| New York | 199 | 205 | +6 |
| Indiana | 210 | 215 | +5 |
| California | 192 | 197 | +5 |
| Massachusetts | 207 | 211 | +4 |
| Georgia | 198 | 202 | +4 |
| NATION | 201 | 205 | +4 |
| Colorado | 206 | 210 | +4 |
| Hawaii | 199 | 202 | +3 |
| Alabama | 193 | 196 | +3 |
| Pennsylvania | 205 | 207 | +2 |
| Virginia | 212 | 214 | +2 |
| New Mexico | 203 | 205 | +2 |
| Kentucky | 199 | 201 | +2 |
| Wisconsin | 213 | 214 | +1 |
| Connecticut | 206 | 207 | +1 |
| Arizona | 203 | 204 | +1 |
| Florida | 207 | 207 | 0 |
| Maryland | 207 | 207 | 0 |
| New Jersey | 206 | 206 | 0 |
| District of Columbia | 182 | 182 | 0 |
| Michigan | 206 | 205 | -1 |
| Utah | 209 | 208 | -1 |
| South Carolina | 200 | 199 | -1 |
| Nebraska | 210 | 209 | -1 |
| Maine | 220 | 218 | -2 |
| Delaware | 199 | 194 | -5 |
| Wyoming | 215 | 209 | -6 |
| Louisiana | 200 | 193 | -7 |
| Iowa | 219 | 212 | -7 |

Minority Achievement Gains, State by State

8th Grade Math Scale Scores, 1990-96

Where are minority students making the largest gains?

The following tables show how many points African American and Latino students gained or lost on the National Assessment of Educational Progress (NAEP). The tables only include those states that participated in both years and had enough members of each student group in the testing sample.

African American

| State | 1990 | 1996 | Change |
|----------------------|------------|------------|-----------|
| Nebraska | 235 | 256 | +21 |
| Colorado | 237 | 255 | +18 |
| Rhode Island | 227 | 244 | +17 |
| North Carolina | 233 | 247 | +14 |
| Michigan | 232 | 246 | +14 |
| Texas | 236 | 249 | +13 |
| West Virginia | 235 | 246 | +11 |
| New York | 236 | 246 | +10 |
| Minnesota | 239 | 249 | +10 |
| Arizona | 245 | 254 | +9 |
| Kentucky | 240 | 248 | +8 |
| California | 233 | 239 | +6 |
| Florida | 231 | 236 | +5 |
| Louisiana | 230 | 235 | +5 |
| NATION | 237 | 242 | +5 |
| Maryland | 238 | 243 | +5 |
| Indiana | 243 | 247 | +4 |
| Connecticut | 241 | 245 | +4 |
| Arkansas | 232 | 235 | +3 |
| Wisconsin | 238 | 240 | +2 |
| Delaware | 242 | 244 | +2 |
| Virginia | 242 | 244 | +2 |
| Georgia | 240 | 241 | +1 |
| District of Columbia | 231 | 231 | 0 |
| Alabama | 234 | 233 | -1 |

Latino

| State | 1990 | 1996 | Change |
|----------------------|------------|------------|-----------|
| North Carolina | 218 | 253 | +35 |
| Minnesota | 239 | 266 | +27 |
| Louisiana | 226 | 242 | +16 |
| North Dakota | 249 | 264 | +15 |
| Connecticut | 237 | 252 | +15 |
| Georgia | 231 | 246 | +15 |
| Virginia | 243 | 258 | +15 |
| Hawaii | 231 | 244 | +13 |
| West Virginia | 232 | 244 | +12 |
| Iowa | 256 | 268 | +12 |
| Maryland | 237 | 248 | +11 |
| Texas | 245 | 256 | +11 |
| Colorado | 247 | 257 | +10 |
| Indiana | 245 | 255 | +10 |
| California | 237 | 246 | +9 |
| Rhode Island | 230 | 239 | +9 |
| Arizona | 242 | 251 | +9 |
| Wisconsin | 250 | 259 | +9 |
| New York | 237 | 245 | +8 |
| Florida | 245 | 253 | +8 |
| NATION | 242 | 250 | +8 |
| Michigan | 243 | 249 | +6 |
| Oregon | 254 | 259 | +5 |
| Alabama | 227 | 232 | +5 |
| New Mexico | 247 | 252 | +5 |
| District of Columbia | 217 | 221 | +4 |
| Delaware | 242 | 244 | +2 |
| Wyoming | 255 | 256 | +1 |
| Nebraska | 253 | 253 | 0 |
| Montana | 263 | 257 | -6 |

Minority Achievement Gains, State by State

4th Grade Reading Scale Scores, 1992-98

Where are minority students making the largest gains?

The following tables show how many points African American and Latino students gained or lost on the National Assessment of Educational Progress (NAEP). The tables only include those states that participated in both years and had enough members of each student group in the testing sample.

African American

| State | 1992 | 1998 | Change |
|----------------------|------------|------------|-----------|
| Rhode Island | 187 | 197 | +10 |
| Connecticut | 196 | 205 | +9 |
| North Carolina | 194 | 200 | +6 |
| Mississippi | 186 | 192 | +6 |
| Alabama | 188 | 193 | +5 |
| California | 184 | 189 | +5 |
| Delaware | 195 | 199 | +4 |
| Florida | 186 | 189 | +3 |
| Michigan | 188 | 191 | +3 |
| Hawaii | 192 | 195 | +3 |
| Maryland | 193 | 195 | +2 |
| South Carolina | 195 | 197 | +2 |
| NATION | 192 | 193 | +1 |
| Colorado | 202 | 202 | 0 |
| Tennessee | 193 | 193 | 0 |
| Virginia | 203 | 203 | 0 |
| Kentucky | 197 | 196 | -1 |
| Minnesota | 191 | 190 | -1 |
| Texas | 200 | 197 | -3 |
| Georgia | 196 | 193 | -3 |
| Massachusetts | 205 | 202 | -3 |
| Arkansas | 190 | 186 | -4 |
| Louisiana | 191 | 186 | -5 |
| Missouri | 196 | 190 | -6 |
| District Of Columbia | 186 | 180 | -6 |
| Wisconsin | 200 | 193 | -7 |
| New York | 202 | 193 | -9 |
| Oklahoma | 201 | 192 | -9 |
| Arizona | 200 | 190 | -10 |
| West Virginia | 204 | 192 | -12 |
| Iowa | 209 | 192 | -17 |
| New Mexico | 202 | 183 | -19 |

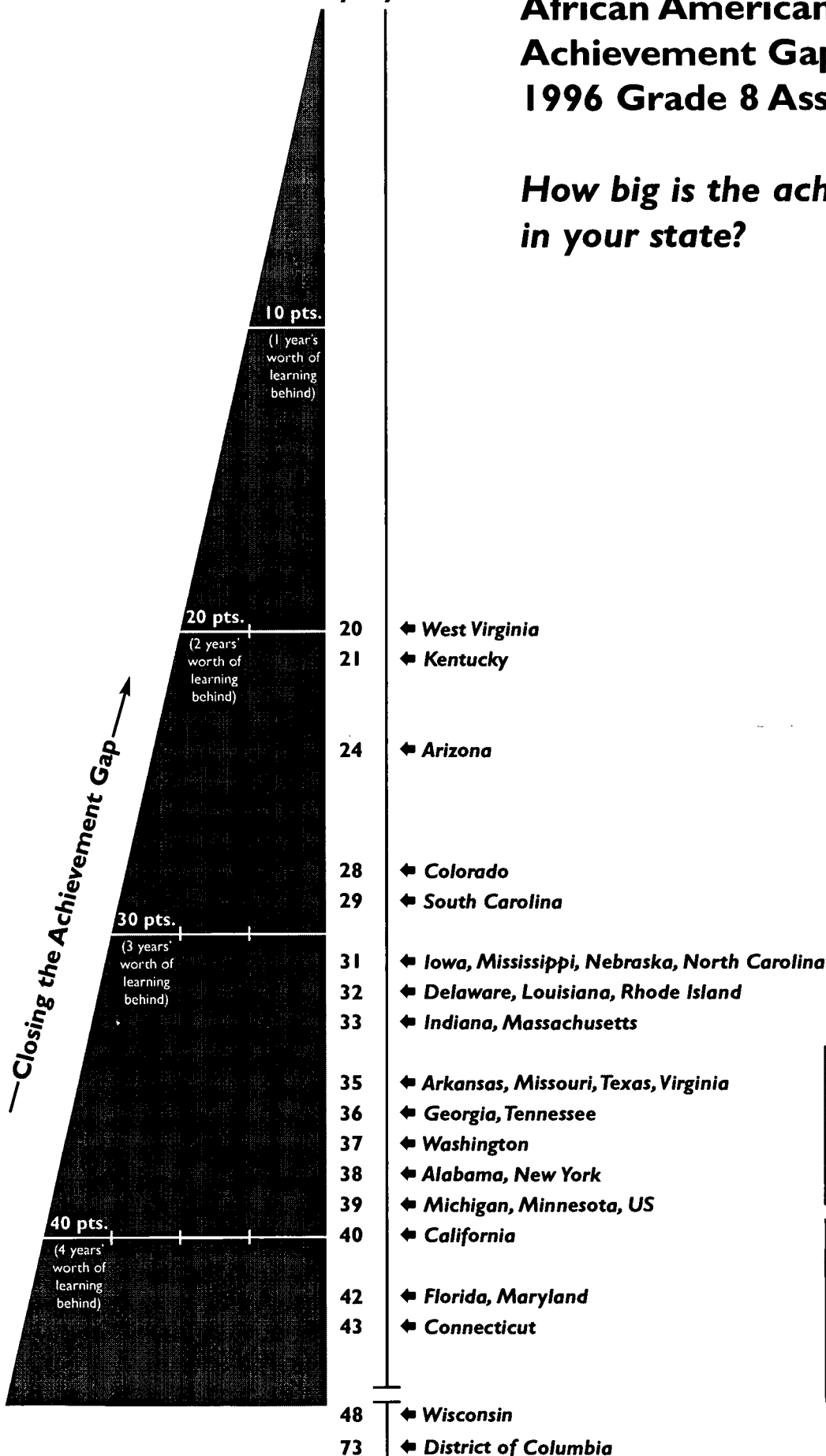
Latino

| State | 1992 | 1998 | Change |
|----------------------|------------|------------|-----------|
| Connecticut | 193 | 205 | +12 |
| New York | 187 | 194 | +7 |
| Delaware | 188 | 193 | +5 |
| North Carolina | 192 | 196 | +4 |
| Maryland | 197 | 200 | +3 |
| Texas | 201 | 204 | +3 |
| Georgia | 192 | 193 | +1 |
| Alabama | 190 | 190 | 0 |
| Colorado | 202 | 202 | 0 |
| Kentucky | 195 | 195 | 0 |
| Minnesota | 203 | 203 | 0 |
| West Virginia | 196 | 196 | 0 |
| Maine | 209 | 208 | -1 |
| Florida | 201 | 200 | -1 |
| Massachusetts | 201 | 200 | -1 |
| Arkansas | 188 | 187 | -1 |
| Oklahoma | 208 | 207 | -1 |
| Iowa | 211 | 210 | -1 |
| New Mexico | 200 | 199 | -1 |
| Wyoming | 209 | 207 | -2 |
| Mississippi | 185 | 183 | -2 |
| California | 183 | 181 | -2 |
| Wisconsin | 210 | 208 | -2 |
| Tennessee | 196 | 193 | -3 |
| NATION | 199 | 195 | -4 |
| Virginia | 202 | 198 | -4 |
| Louisiana | 188 | 184 | -4 |
| Michigan | 198 | 193 | -5 |
| Rhode Island | 191 | 185 | -6 |
| South Carolina | 195 | 189 | -6 |
| Missouri | 202 | 196 | -6 |
| District Of Columbia | 177 | 168 | -9 |
| Hawaii | 193 | 183 | -10 |
| Arizona | 198 | 186 | -12 |
| New Hampshire | 215 | 201 | -14 |
| Utah | 204 | 189 | -15 |

★ **Equity** ★

African American-White Math Achievement Gaps: NAEP 1996 Grade 8 Assessment

How big is the achievement gap in your state?



States with sample sizes too small

Alaska, Hawaii, Maine, Montana, New Mexico, North Dakota, Oregon, Utah, Vermont, Wyoming

States that did not participate

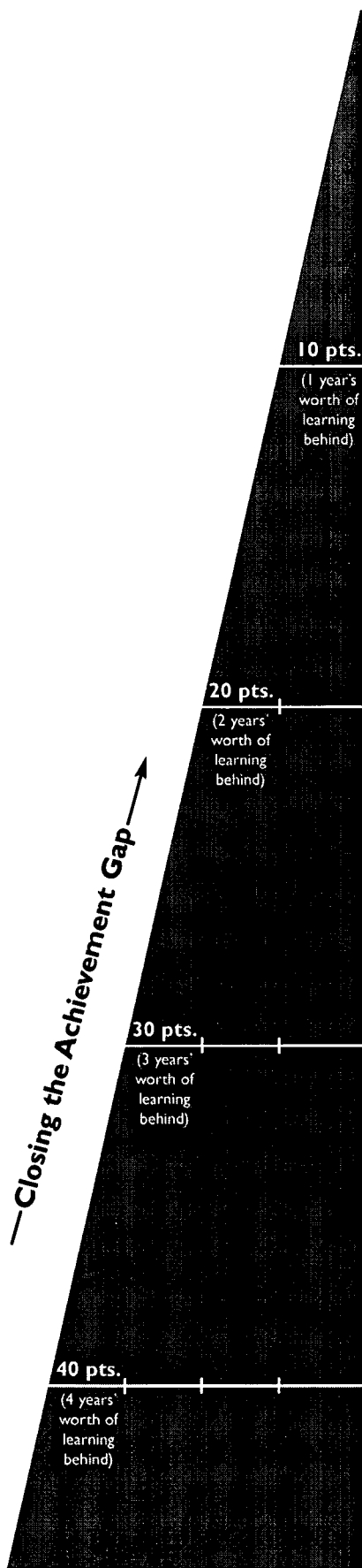
Idaho, Illinois, Kansas, Nevada, New Hampshire, New Jersey, Ohio, Oklahoma, Pennsylvania, South Dakota

Note: Gaps are measured by the point difference between minority and White average scale scores.

★ **Equity** ★

Latino-White Math Achievement Gaps: NAEP 1996 Grade 8 Assessment

*How big is the achievement gap
in your state?*



- 17 ← Iowa
- 19 ← Missouri
- 20 ← Oregon
- 22 ← Minnesota, North Dakota, Virginia, West Virginia, Wyoming
- 24 ← Louisiana, Utah
- 25 ← North Carolina, Tennessee
- 26 ← Colorado, Florida, Indiana
- 27 ← Arizona
- 28 ← New Mexico
- 29 ← Hawaii, Texas
- 30 ← Georgia, Montana, Wisconsin
- 31 ← Delaware, Washington, US
- 33 ← Alaska, California
- 34 ← Nebraska
- 36 ← Connecticut, Michigan, Rhode Island
- 37 ← Maryland
- 39 ← New York, South Carolina
- 40 ← Alabama
- 41 ← Massachusetts
- 42 ← Mississippi

82 ← District of Columbia

19

States with sample sizes too small

Arkansas, Kentucky,
Maine, Vermont

States that did not participate

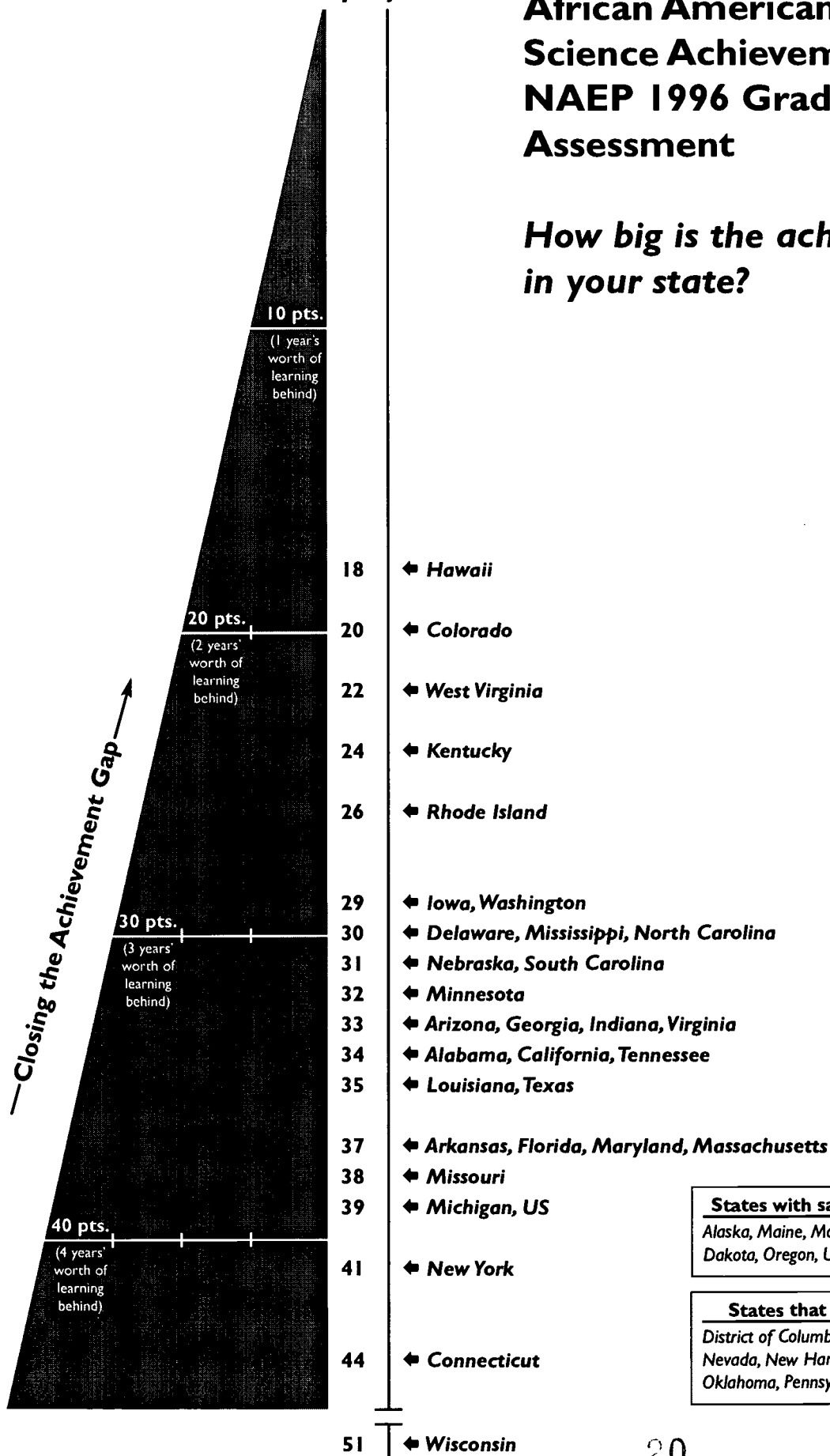
Idaho, Illinois, Kansas,
Nevada, New Hampshire,
New Jersey, Ohio,
Oklahoma, Pennsylvania,
South Dakota

Note: Gaps are measured by the point difference between minority and White average scale scores.

★ Equity ★

African American-White Science Achievement Gaps: NAEP 1996 Grade 8 Assessment

*How big is the achievement gap
in your state?*



States with sample sizes too small
Alaska, Maine, Montana, New Mexico, North Dakota, Oregon, Utah, Vermont, Wyoming

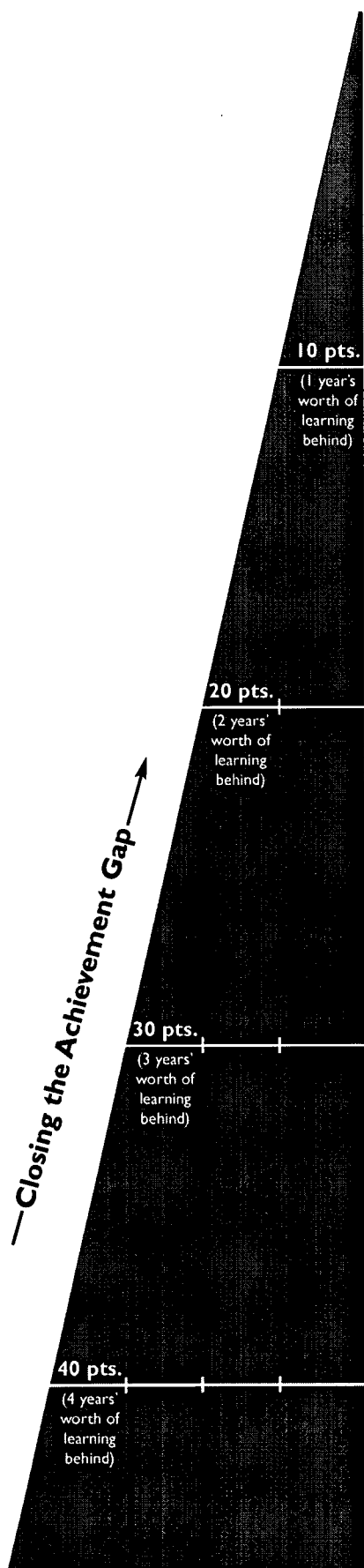
States that did not participate
District of Columbia, Idaho, Illinois, Kansas, Nevada, New Hampshire, New Jersey, Ohio, Oklahoma, Pennsylvania, South Dakota

Note: Gaps are measured by the point difference between minority and White average scale scores.

★ **Equity** ★

Latino-White Science Achievement Gaps: NAEP 1996 Grade 8 Assessment

*How big is the achievement gap
in your state?*



| | |
|----|--|
| 19 | ← Indiana, Montana |
| 20 | ← Iowa |
| 22 | ← Wyoming |
| 23 | ← Maine, Vermont |
| 24 | ← Oregon |
| 25 | ← Alaska, Hawaii, Wisconsin |
| 26 | ← Florida, Utah |
| 27 | ← Colorado, Georgia, Michigan, Nebraska, North Dakota, Virginia, West Virginia |
| 28 | ← Missouri |
| 29 | ← Arizona, Minnesota, New Mexico |
| 30 | ← Washington |
| 31 | ← South Carolina, US |
| 32 | ← Arkansas |
| 33 | ← Texas |
| 34 | ← North Carolina |
| 35 | ← California |
| 36 | ← Delaware, Massachusetts |
| 37 | ← Kentucky, Rhode Island |
| 39 | ← Maryland |
| 43 | ← Connecticut, Louisiana |
| 44 | ← Mississippi |
| 45 | ← Alabama, New York |
| 47 | ← Tennessee |

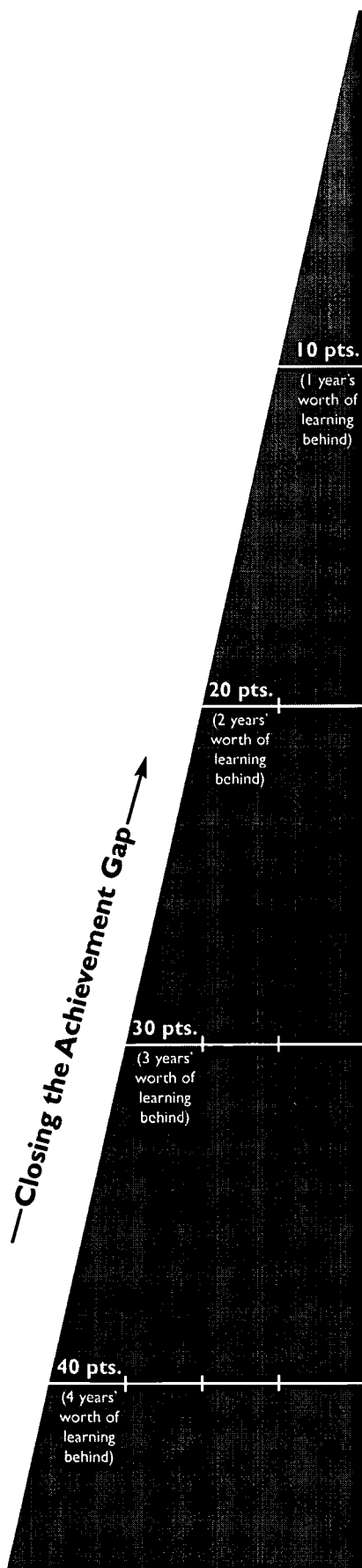
States that did not participate

District of Columbia,
Idaho, Illinois, Kansas,
Nevada, New Hampshire,
New Jersey, Ohio,
Oklahoma, Pennsylvania,
South Dakota

★ **Equity** ★

African American-White Reading Achievement Gaps: NAEP 1998 Grade 8 Assessment

*How big is the achievement gap
in your state?*



| | |
|----|--|
| 16 | ↔ Hawaii, Rhode Island |
| 17 | ↔ West Virginia |
| 18 | ↔ Oklahoma |
| 19 | ↔ Kansas |
| 20 | ↔ Washington |
| 22 | ↔ North Carolina |
| 23 | ↔ Kentucky, Massachusetts |
| 24 | ↔ South Carolina |
| 25 | ↔ Alabama, California, Delaware, Mississippi, Missouri, Nevada, Virginia |
| 26 | ↔ Arizona |
| 27 | ↔ Louisiana |
| 28 | ↔ Arkansas, Tennessee, Texas |
| 29 | ↔ New York, US |
| 30 | ↔ Florida, Georgia |
| 31 | ↔ Colorado, Maryland |
| 33 | ↔ Wisconsin |
| 37 | ↔ Connecticut |
| 39 | ↔ Minnesota |
| 46 | ↔ District of Columbia |

States with sample sizes too small

Montana, New Mexico,
Oregon, Utah, Wyoming

States that did not participate

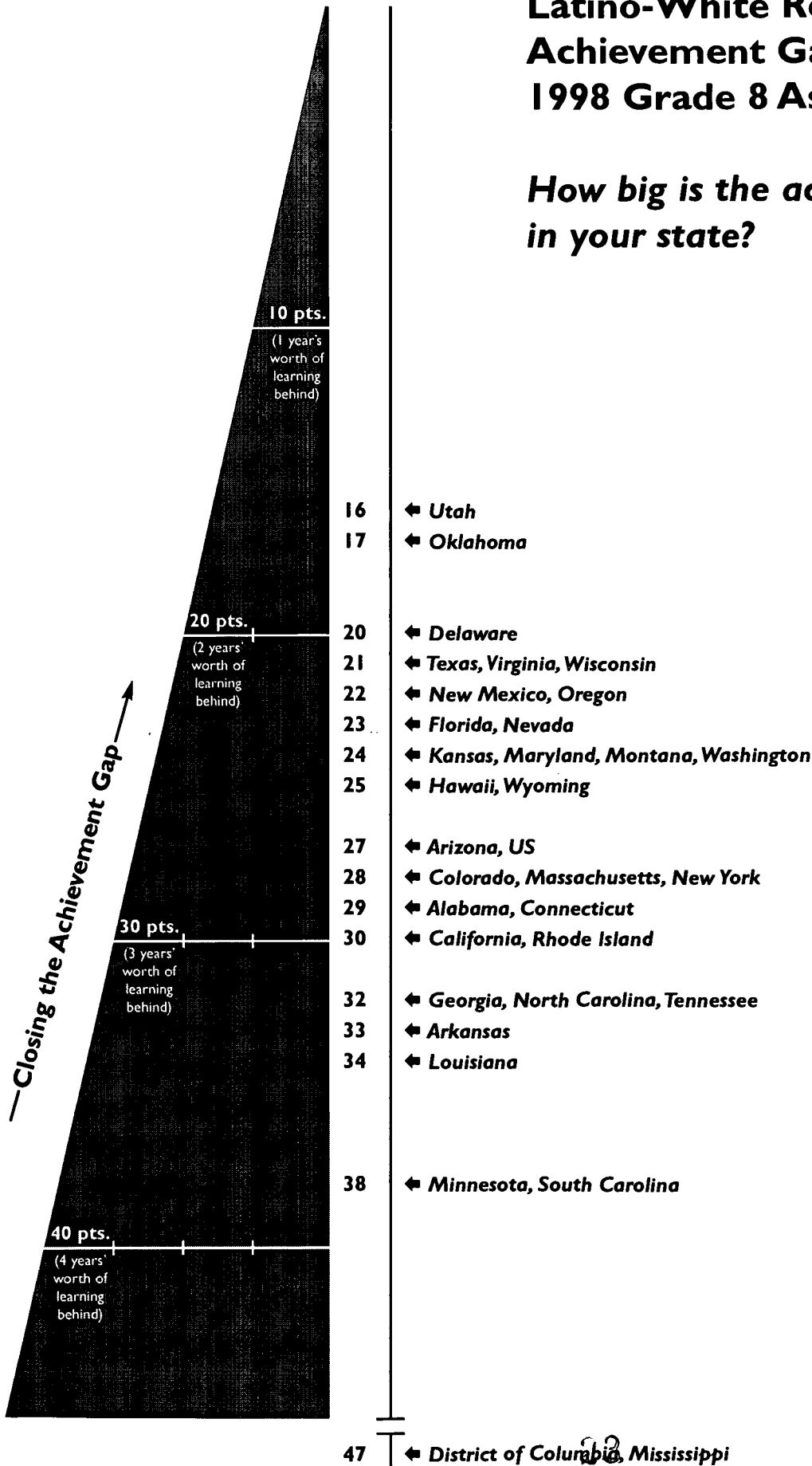
Alaska, Idaho, Illinois,
Indiana, Iowa, Maine,
Michigan, Nebraska, New
Hampshire, New Jersey,
North Dakota, Ohio,
Pennsylvania, South
Dakota, Vermont

Note: Gaps are measured by the point difference between minority and White average scale scores.

★ Equity ★

Latino-White Reading Achievement Gaps: NAEP 1998 Grade 8 Assessment

How big is the achievement gap in your state?



States with sample sizes too small

Kentucky, Missouri, West Virginia

States that did not participate

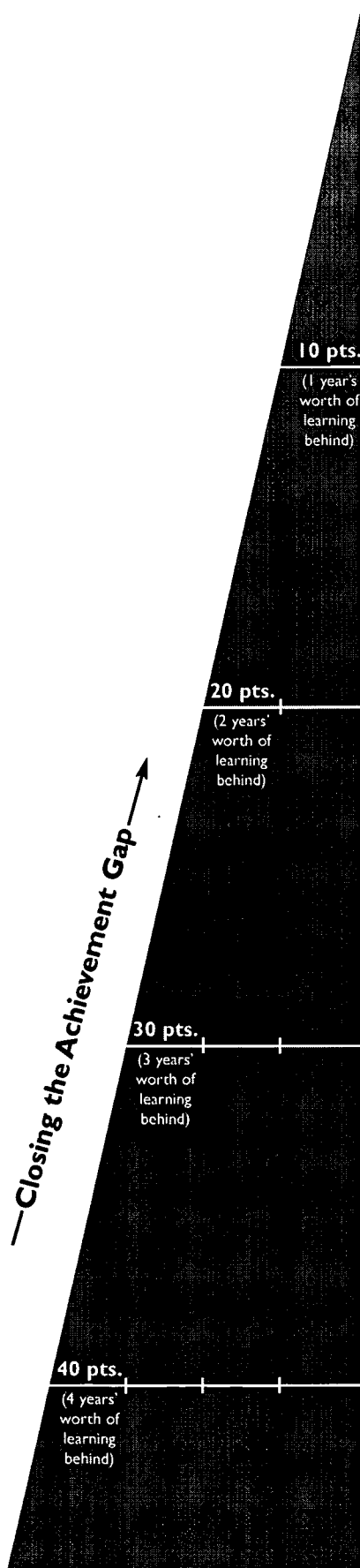
Alaska, Idaho, Illinois, Indiana, Iowa, Maine, Michigan, Nebraska, New Hampshire, New Jersey, North Dakota, Ohio, Pennsylvania, South Dakota, Vermont

Note: Gaps are measured by the point difference between minority and White average scale scores.

★ **Equity** ★

African American-White Writing Achievement Gaps: NAEP 1998 Grade 8 Assessment

*How big is the achievement gap
in your state?*



5 ← **West Virginia**

15 ← **Nevada, Wisconsin**

17 ← **Hawaii**

18 ← **Texas**

19 ← **Virginia**

20 ← **Kentucky, New Mexico, Rhode Island**

21 ← **Alabama**

22 ← **Arkansas, Delaware, Mississippi, Oklahoma, South Carolina, Tennessee, Washington**

23 ← **California, Louisiana, Missouri**

25 ← **Colorado, Florida, Georgia, North Carolina**

26 ← **Maryland, Massachusetts, New York, US**

29 ← **Minnesota**

31 ← **District of Columbia**

32 ← **Arizona**

34 ← **Connecticut**

States with sample sizes too small

*Montana, Oregon, Utah,
Wyoming*

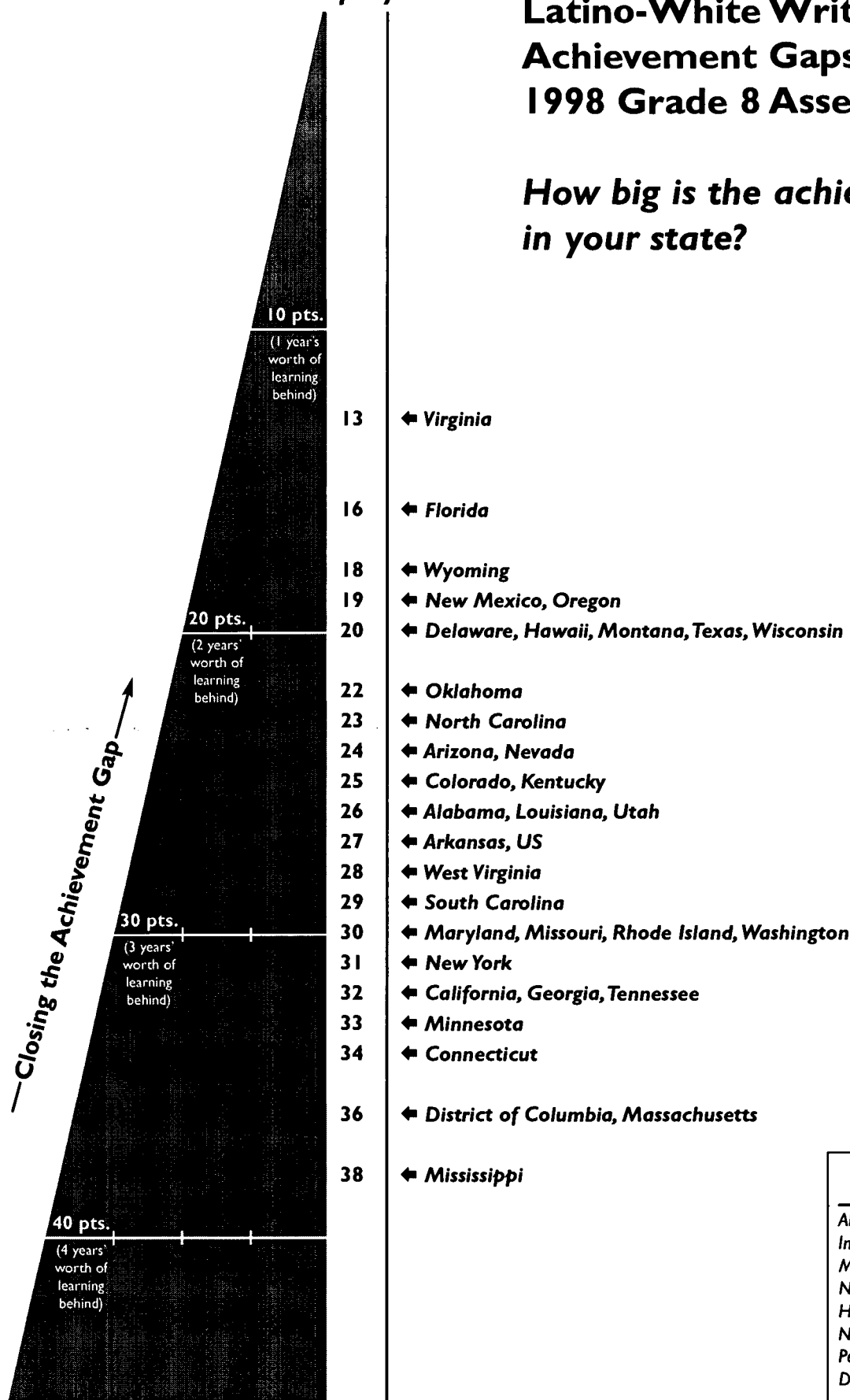
States that did not participate

*Alaska, Idaho, Illinois,
Indiana, Iowa, Kansas,
Maine, Michigan,
Nebraska, New
Hampshire, New Jersey,
North Dakota, Ohio,
Pennsylvania, South
Dakota, Vermont*

★ **Equity** ★

Latino-White Writing Achievement Gaps: NAEP 1998 Grade 8 Assessments

*How big is the achievement gap
in your state?*



States that did not participate

Alaska, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, Michigan, Nebraska, New Hampshire, New Jersey, North Dakota, Ohio, Pennsylvania, South Dakota, Vermont

References

Please note: For calculations and technical notes, please see our *Definitions and Sources* online at www.edtrust.org.

STUDENT PROFILE

Population Ages 5-24

Department of Commerce, Bureau of the Census, Current Population Survey, July, 1999. Calculations by Marie Pees.

Public K-12 Enrollments

Common Core of Data School Years 1993-94 through 1997-98 CD-ROM, (Washington D.C.: National Center for Education Statistics, U.S. Department of Education, December 1999)

Private K-12 Enrollments

Private School Universe Survey, 1997-98, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, August 1999). Tabulations by the National Education Data Resource Center.

Two-Year and Four-Year Colleges Enrollments

Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Survey, 1997, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, 1999). Tabulations by the National Education Data Resource Center.

PERFORMANCE

Academic Achievement:

National Assessment of Educational Progress (NAEP) Proficiency Levels

All data were all obtained online through NCES using the NAEP Summary Data Tables:
<http://nces.ed.gov/nationsreportcard/TABLES/SDTTOOL.HTM>

SAT/ACT Composite Scores and Test-takers

SAT—*College-Bound Seniors: 2000 Profile of SAT Program Test Takers, and State SAT Scores, 1988-2000* (Princeton, N.J.: The College Board, 2000).

ACT—*ACT High School Profile Report, High School Graduating Class of 2000, National and State Reports*, (Iowa City, IA: American College Testing (ACT), 2000).

Attainment:

8th Graders, 1993-1994: *Common Core of Data School Years 1993-94 through 1997-98* CD-ROM (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, December 1999)

Graduates, 1998: *State Nonfiscal Public Elementary/Secondary Education Survey Data*, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, December 2000) Percentages calculated by the Education Trust.

Chances for College

Postsecondary Education Opportunity, August 2000. Calculations by Tom Mortenson. (Oskaloosa, IA: Thomas Mortenson, 2000). For more information, go to the Postsecondary Education OPPORTUNITY website at: <http://www.postsecondary.org/>

First-time Freshman, 1993—*Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Survey, 1993-94*, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education). Tabulations provided by the National Education Data Resource Center. Calculations by the Education Trust.

Bachelors Degrees Awarded, 1997—*Integrated Postsecondary Education Data System (IPEDS), Completions Survey, 1996-97*, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education). Tabulations provided by the National Education Data Resource Center. Calculations by the Education Trust.

OPPORTUNITY: INVESTMENTS IN WELL-PREPARED TEACHERS

Percentage of Secondary School Classes Taught by Underqualified Teachers

1993-94 Schools and Staffing Survey, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education). Calculations by Richard Ingersoll, University of Georgia., published by the Education Trust, *Thinking K-16* (Washington, D.C.: The Education Trust, Summer 1998)

Percentage of Eighth Grade Math Students Taught by Math Majors

NAEP 1996 Summary Data Tables – Teacher Data Tables, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, 1997), nces.ed.gov/NAEP/table96.

References

OPPORTUNITY: INVESTMENTS IN CHALLENGING CURRICULA

Enrollment in High-Level Courses

8th Grade Algebra—NAEP 1996 Summary Data Tables – Student Data Tables, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, 1997), nces.ed.gov/NAEP/tables96.

Algebra II and Chemistry—Council of Chief State School Officers, *State Education Assessment Center, State Indicators of Science and Mathematics Education 1999—State Trends and New Indicators from the 1997-98 School Year, Table 17*. (Washington, D.C.: Council of Chief State School Officers, 1997). Available online at <http://www.ccsso.org/SciMathIndicators99.html>.

Special student placements: Gifted and Talented, Special Education and Suspensions—U.S. Department of Education, Office for Civil Rights, 1998 *Elementary and Secondary School Civil Rights Compliance Report*, (Washington: D.C.: Office for Civil Rights, U.S. Department of Education, 2000).

Composition of AP Test Takers

The College Board, *2000 Advanced Placement State and National Summary Reports*, (Princeton, N.J.: The College Board, 2000).

OPPORTUNITY: INVESTMENT IN EFFECTIVE INSTRUCTION

Effective math and science instruction

NAEP 1996 Summary Data Tables – Teacher Data Tables, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, 1997), <http://nces.ed.gov/nationsreportcard/tables96/>.

OPPORTUNITY: FINANCIAL INVESTMENTS

State and Local Revenues of School Districts, by Child Poverty and Student Minority Status—Calculations conducted for the Education Trust by Greg F. Orlofsky, using a database constructed for the purpose from the data sources described below:

- Adjusted school district revenues: F-33 Annual Survey of Local Government Finances, 1997, Data Files, (Washington, DC, U.S. Census Bureau, 2000)
- Minority students by district: Common Core of Data School Years 1993-94 through 1997-98 CD-ROM, (Washington D.C.: National Center for Education Statistics, U.S. Department of Education, December 1999)
- Children in poverty by district: Small Area Income and Poverty Estimates: School District Estimates, (Washington, DC, U.S. Census Bureau, 2000)

Per Pupil Investment

Early Estimates of Public Elementary and Secondary Education Statistics: School Year 1999-2000 (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, June 2000).

Effort, 1997-98

Gross state product — Regional Accounts Data, U.S. Department of Commerce, Bureau of Economic Analysis, available at <http://www.bea.doc.gov/bea/regional/gsp>.

State and local revenue — *Revenues and Expenditures for Public Elementary and Secondary Education: School Year 1997-98* (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, May 2000)

College vs. Prison

State University Costs—American Association of State Colleges and Universities, and the National Association of State Universities and Land-Grant Colleges, *Student Charges and Financial Aid 1998-99, Appendices A and B* (Washington, D.C.: American Association of State Colleges and Universities, and the National Association of State Universities and Land-Grant Colleges, 1999).

Prison Cost—Criminal Justice Institute, *The 1999 Corrections Yearbook*, (South Salem, N.Y.: Criminal Justice Institute, 2000).

Change in State Investments, 1997-99

National Conference of State Legislatures, *State Budget Actions 1997*, (Washington, D.C.: National Conference of State Legislatures, December 1997), and *State Budget Actions 1999*, (Washington, D.C.: National Conference of State Legislatures, December 1999).

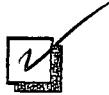


U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



NOTICE

REPRODUCTION BASIS



This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").